OEM-CERTIFIED AEROSTRUCTURES SOLUTIONS

BOEING AUSTRALIA COMPONENT REPAIRS

//With Boeing Australia Component Repairs Pty Ltd (BACR) the maintenance, repair and overhaul (MRO) of your aircraft structural components is in the best possible hands.//

In the exacting world of aircraft structural support, Boeing Australia Component Repairs, a subsidiary of The Boeing Company, offers sophisticated technologies, leading-edge equipment and state-of-the-art MRO know how. The commitment, innovation and experience of our engineers and technicians ensures your expectations will be met and exceeded.

BACR has operated in Melbourne, Australia since 1990 and is equipped with extensive facilities to maintain, repair, overhaul, modify and manage a wide range of composite, bonded and conventional metal aircraft structures for both commercial and military aircraft operators.

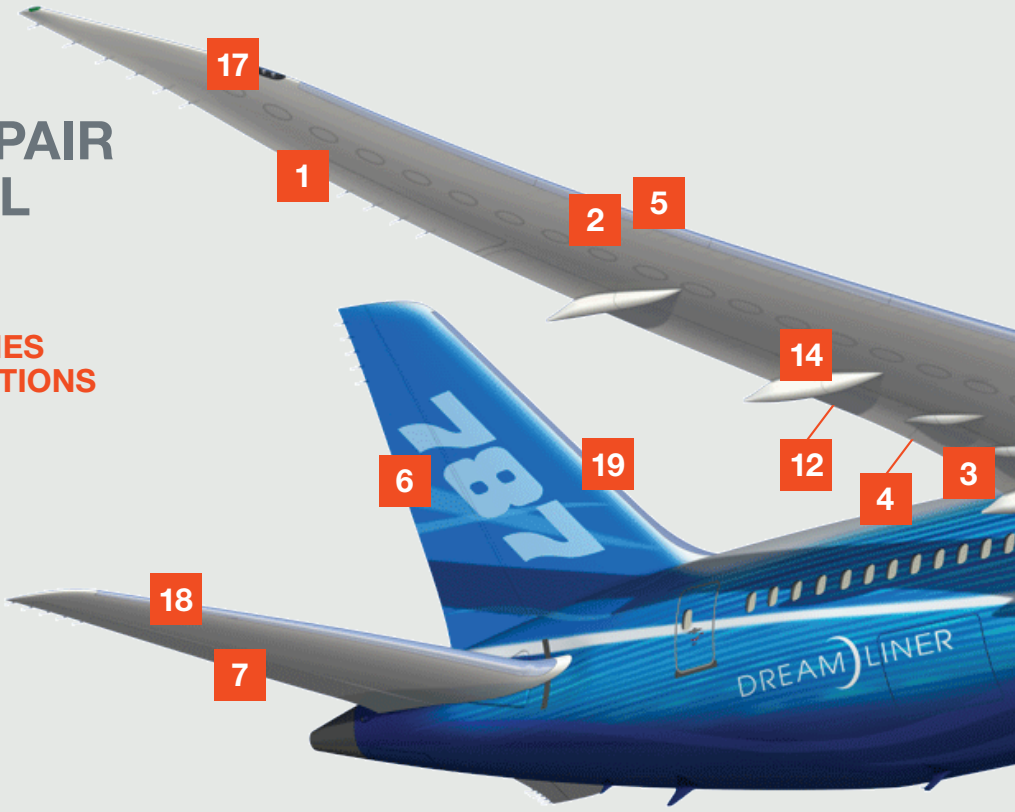
BACR is one of the very few MROs in the Asia Pacific region that is directly related to a primary Original Equipment Manufacturer (OEM) and as a consequence is able to operate a cost-effective, fast turn-around time (TAT) business offering a unique, distinctive and sustainable competitive solution.

BACR holds a wide range of MRO-specific tooling, equipment and processes. These include comprehensive stocks of advanced composite prepregs, adhesive films, bond tooling, autoclaves, clean room facilities, non-destructive testing equipment, robotics and on-wing repair capability.

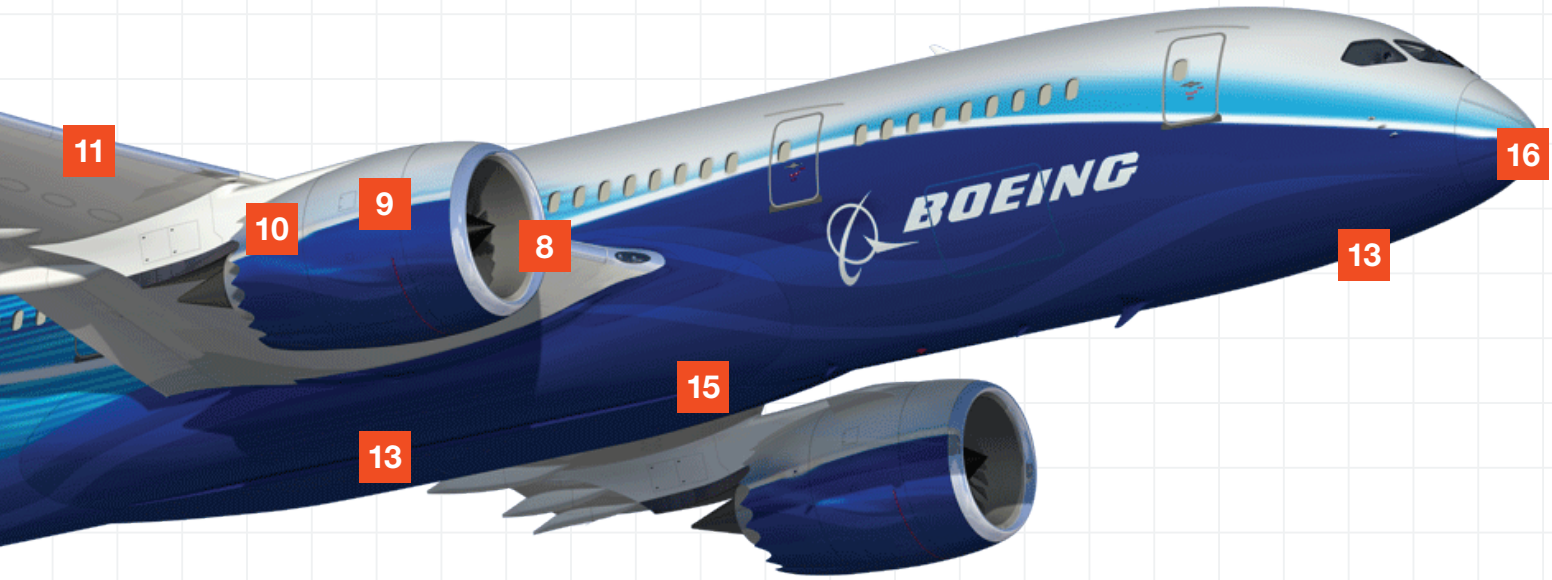
COMPLETE REPAIR AND OVERHAUL SERVICE

FAST TURN AROUND TIMES SUPERIOR REPAIR SOLUTIONS

BACR's convenient location within the Melbourne International Airport precinct allows components of both domestic and international origin to be managed through the MRO process with the urgency essential to airline customers. Flexible and customised repair solutions can be tailored to suit the ever-changing requirements of customers.



//BACR provides repair and overhaul services including on-wing repair support for Boeing, Airbus, Embraer, Bombardier and multiple military platforms.//



FLIGHT CONTROLS

1 Aileron
2 Slat
3 Flap
4 Spoiler
5 LE Flap
6 Rudder
7 Elevator

NACELLE

8 Inlet Cowl
9 Fan Cowl
10 Thrust Reverser

OTHER STRUCTURAL COMPONENTS

11 Wing Fixed LE Panels
12 Wing Fixed TE Panels
13 Landing Gear Doors
14 Flap Track Fairing
15 Body Fairing
16 Radome
17 Winglet
18 Hori Stab Leading Edge
19 Vertical Fin Leading Edge

ACCREDITED SERVICE, EXPERTISE AND FACILITIES

TOTAL CUSTOMER SATISFACTION

BACR can offer its customers greater value because of its links to other major OEM capability sites in Australia and beyond, including Boeing Aerostructures Australia, Boeing Research and Technology, and Boeing Defence Australia.

The added value and deep technical backup of this OEM network supplements BACR's already extensive in-house capabilities and provides a practical means to minimising costs and delivering improved value-for-money solutions to our customers.

REPAIR FACILITIES

- Autoclaves (small to large)
- Machining facility
- Clean rooms
- Computer controlled ovens
- Dust extraction booths
- Computer-controlled hot bonders
- Flame spray facility
- Sheet metal fabrication
- Painting and finishing facility

ENGINEERING FACILITIES

- Development of customised maintenance work scopes
- Design and development of repairs
- Design and development of modifications
- Airline line and heavy maintenance support engineering
- Investigation of defects
- Computer Aided Drafting
- Tooling design and manufacture
- On-line reach back to OEM engineering
- CASA Part 21M approved persons

ACCREDITATIONS: AIRWORTHINESS REGULATORY APPROVALS

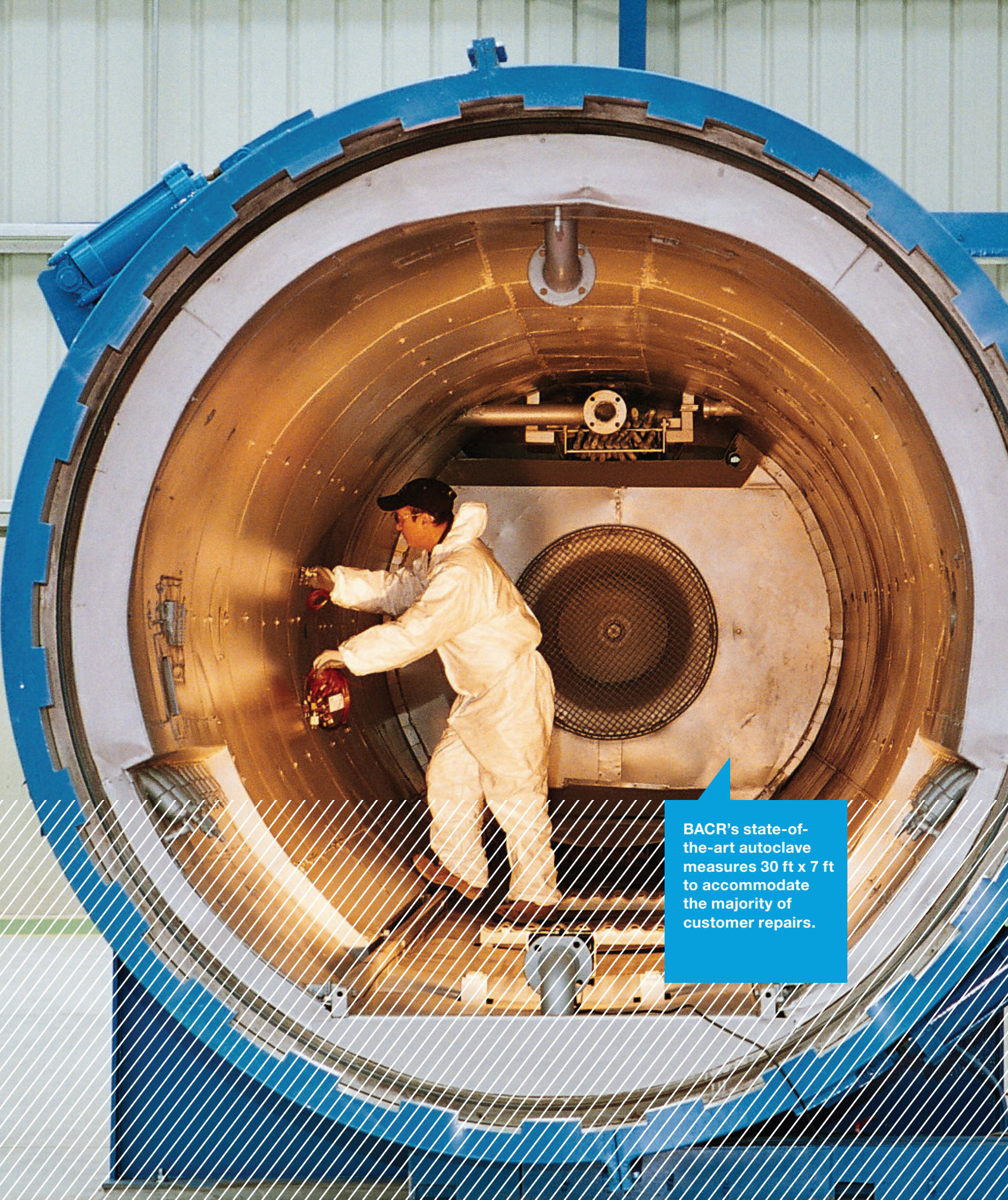
FAA: FAR145	EASA: PART145	CASA: CASR PART145
Certificate No. T0QY719Y	Certificate No. EASA.145.0075	Certificate No. 1-QFMJX

AUSTRALIAN DEFENCE FORCE

Authorised Engineering Organisation (AEO)	Authorised Maintenance Organisation (AMO
DGTA 155	DGTA 098

SAFETY, HEALTH, ENVIRONMENT AND QUALITY CERTIFICATIONS

Health and Safety	Environment Management System	Quality Management System
OHSAS18001:126098-2012-AHSO-AUS-JAS-ANZ	ISO14001:126097-2012-AE-AUS-JAS-ANZ	ISO 9001:126619-2012-AQ-AUS-JAS-ANZ



BACR's state-of-the-art autoclave measures 30 ft x 7 ft to accommodate the majority of customer repairs.

BACR's extensive, high-technology NDT capabilities include radome ultrasonic inspection.

NON-DESTRUCTIVE TESTING

QUALITY AND RELIABILITY

The introduction into airline service of all-carbon aircraft poses particular challenges for the MRO industry. In response, BACR has invested heavily in developing its capabilities to address these needs by focusing on streamlining the Non-Destructive Testing (NDT) services that are now such an intensive part of the process.

BACR repair technicians have been cross trained to perform the NDT content of the composite repair process to ensure maximum utility, minimum TAT and lowest cost.

THERMOGRAPHIC

» Thermographic equipment (Ideal for inspection of water ingress in composites)

ULTRASONICS

» Manual “A” units, both contact and through transmission

» Computer aided immersion tank scanner

» Bondascope and Bondmaster inspection units

RADIOGRAPHIC

» Static X-ray units

DYE PENETRANT

» Electrostatic fluorescent water washable penetrant processing facilities

MAGNETIC PARTICLE

» Portable MPI equipment for on-site testing

EDDY CURRENT

» Both high and low frequency units available

COST-EFFECTIVE REPAIRS TO THRUST REVERSERS

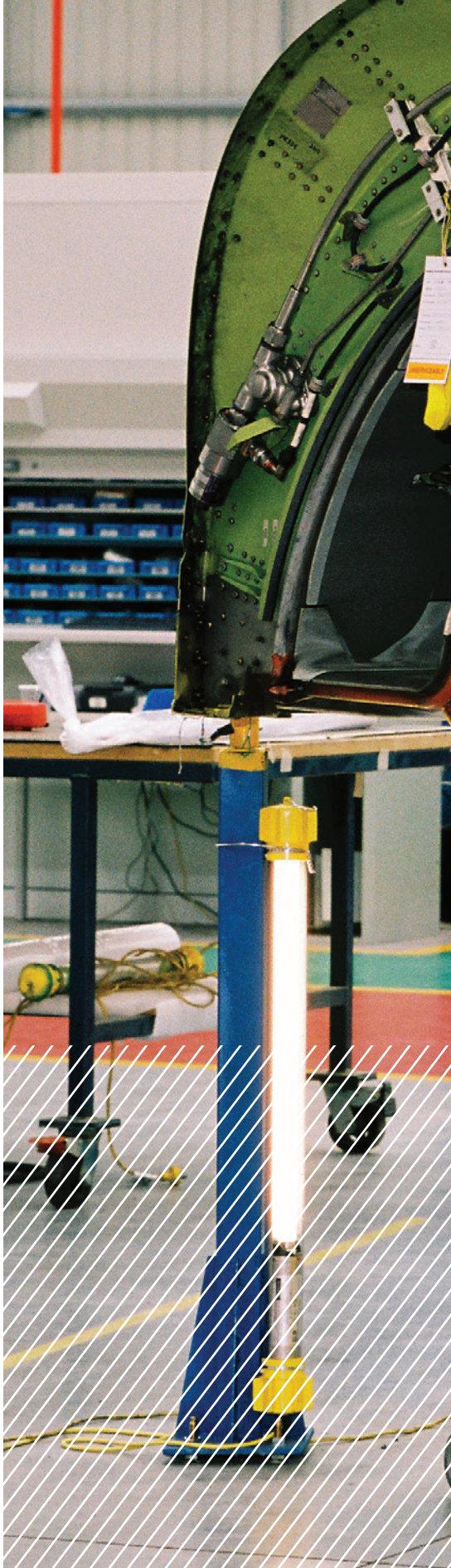
STREAMLINED REPAIR SOLUTIONS

BACR has more than 10 years experience maintaining thrust reversers for airlines in the Asia-Pacific region and can execute a comprehensive range of complete reverser overhaul solutions that include metallic, metal-bond and composite repair content.

BACR has made a significant investment in the jigs and special tools required for high precision reassembly, giving regional airlines a comprehensive range of secure and cost-effective local solutions.

The Melbourne Airport facility also houses state-of-the-art equipment including an autoclave, and has the added support of its link to Boeing Aerostructures Australia which has large autoclaves and additional equipment available for BACR use.

Typical capabilities cover Trent 800 reversers, the CF6-80 reverser family, CFM56-7 reversers, V2500 reversers and other similar metal-bond and composite reverser types. BACR also maintains a range of bond tools for the repair of these structures and has an in-house capability to fabricate other high temperature autoclave bond tools as required.



BACR offers Asia-Pacific customers a complete, cost-effective thrust reverser overhaul solution.

BACR's modern clean room offers customers a critical facility for the repair of advanced composite components.

HEAVY STRUCTURE REPAIRS, MAINTENANCE, OVERHAUL AND ON-WING REPAIR

PROCESSES TO DEAL WITH MORE COMPLEX AIRCRAFT

As new aircraft programs, such as the in-service Boeing 787 and the soon–to-be delivered Airbus A350, drive the use of composites into safety-critical primary structures, one of the major challenges the aerospace industry faces is the design, certification and incorporation of composite repairs. In response, BACR has invested in training, equipment, tools, and materials to address these complexities and challenges.

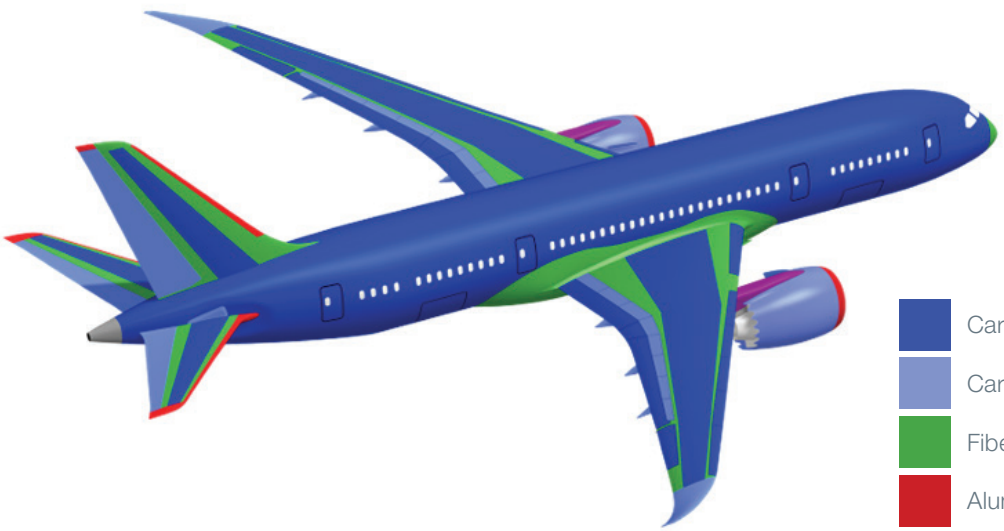
ON-WING REPAIR

BACR has a specialised repair team with the capability to accomplish and certify on-wing repairs of composite structures on new generation aircraft, including the Boeing 787.

Together with Boeing Research & Technology-Australia, BACR is developing a robotic repair solution to provide a lower risk, safer, more cost-effective and faster on-wing composite repair than the manual repair techniques used today.

OVERHAUL AND MAJOR REPAIR

BACR can perform overhaul on metallic structures and composites including major repairs such as the repair or replacement of spars, ribs, stringers, fittings and skins using maintenance jigs, CMM technology, bondforms, and autoclaves as necessary.



- Carbon laminate
- Carbon sandwich
- Fiberglass
- Aluminium
- Aluminium/steel/titanium pylons

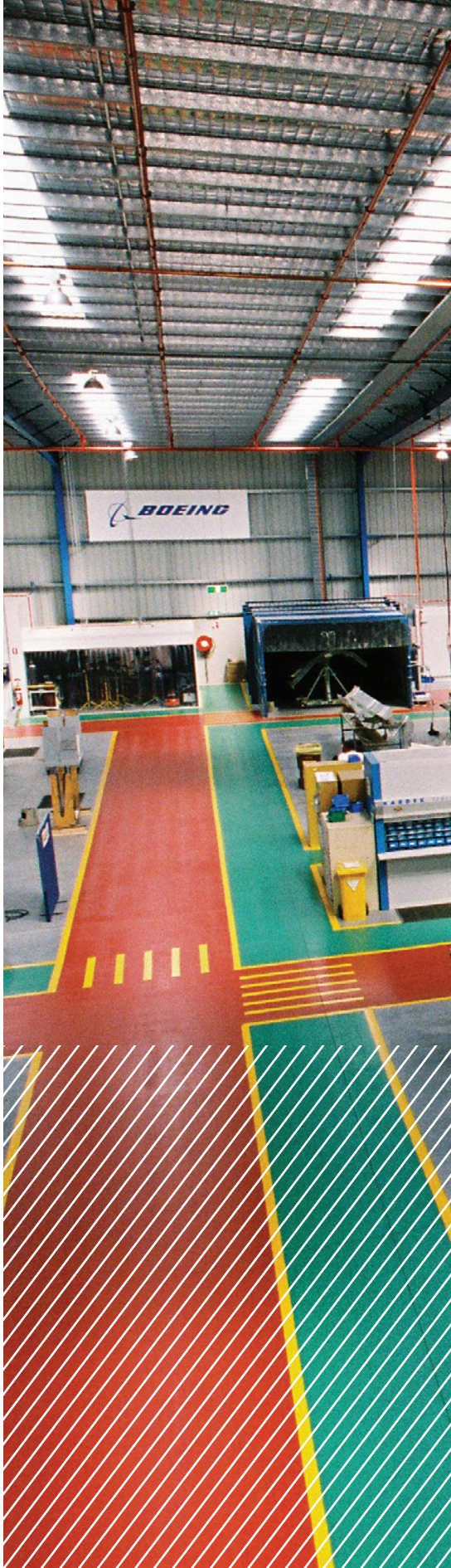
BOEING AUSTRALIA COMPONENT REPAIRS

A PROUD HISTORY OF INNOVATION AND COMMITMENT

BACR is a wholly-owned Australian subsidiary of The Boeing Company with a proud history spanning more than 15 years of continuous operation.

BACR has its origins within three companies with great traditions and capabilities in the aircraft industry – Aerospace Technologies of Australia Limited (previously Government Aircraft Factories,1939), Commonwealth Aircraft Corporation (1936), and Hawker de Havilland (1927).

//BACR and all of its employees are committed to maintaining the highest level of safe operation, well-being and environmental protection.//



BACR's state-of-the-art facility in Melbourne offers regional airlines comprehensive, efficient and cost-effective MRO solutions.

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